

ESF-10

HAZARDOUS MATERIALS RESPONSE

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ESF-10

HAZARDOUS MATERIALS RESPONSE

PRIMARY AGENCIES: Springfield Fire Department
Logan-Rogersville Fire Protection District
Battlefield Fire Protection District

SUPPORT AGENCIES: City of Battlefield
Springfield-Greene County Office of Emergency Management (OEM)
Fire Protection Districts
Local Emergency Planning Committee

I. PURPOSE

The purpose of this ESF is to assist local officials and emergency responders in coordinating the response and restoration activities subsequent to a hazardous materials release. A release of hazardous materials may cause injury or death and may have disastrous effects to the environment. Hazardous materials, including Extremely Hazardous Substances (EHS), are regulated by Title III of Superfund Amendments and Re-authorization Act (SARA) and Missouri State Statutes.

II. SITUATIONS AND ASSUMPTIONS

A. Situation

1. Ten (10) major roadways traverse through Springfield-Greene County and are common routes for the transportation of hazardous substances. US 160 is nearest to the City of Battlefield. The other routes are listed below:

a. Highway 65	f. Chestnut Expressway
b. Interstate 44	g. West Bypass
c. James River Expressway	h. Division/EE Highway
d. Highway 13	i. Sunshine/US 60
e. Kansas Expressway	j. US 160
2. There are numerous rail lines throughout Greene County as well as one that runs near the City of Battlefield that provide for the transportation and of rail cars which regularly contain hazardous substances.
3. There are four (4) major petroleum pipelines that run through Greene County. In addition, there is a vast network of pipelines that carry natural gas and other materials throughout the county.
4. There are a large number of fixed facilities in Springfield-Greene County that use, produce and/or store hazardous materials.
5. Resources (trained personnel and equipment) for response to hazardous material incidents in Greene County are limited. (see **ESF 4 Appendix 4& 5**). FEMA typing NFPA 471, 472, and 473 are used for identification.
6. Response to a serious chemical incident may require outside resources from adjacent counties, cities, state and federal government and the private sector.
7. A Hazardous Materials Flow Study is completed to identify types of hazardous materials that travel through the Greene County area.

8. Emergency equipment for each facility can be requested from the Tier II database.

B. Assumptions

1. The Local Emergency Planning Committee (LEPC) for Greene County recognizes the responsibility for public health and safety, the need to plan for and set forth procedures and guidelines to deal with hazardous material incidents and the need to exercise the procedures and guidelines and policies set forth in this ESF.
2. Proper implementation of this ESF will reduce or prevent hazardous materials releases or other exposures to the public and environmental damage.
3. Awareness of the local hazards along with appropriate training may reduce the effects of a hazardous materials incident.
4. The use of local and outside resources shall require substantial coordination.
5. Incidents may occur with little or no warning.
6. Protective actions for the general population may include in-place protection and/or evacuation.

III. CONCEPT OF OPERATIONS

A. General

The carrier or spiller of a hazardous material is responsible for making the emergency notifications immediately to the Emergency Communications Center (ECC), Local Emergency Planning Committee (LEPC), OEM Director or community coordinator. Upon arrival, first response agencies will assess the situation and make additional notifications as appropriate.

At the request of the spiller or first response agency, EMS may be requested thru the ECC.

Springfield and Logan Rogersville Fire Departments have combined resources to provide Hazardous Material Response Capabilities to the Greene County area.

Response to a hazardous materials incident shall be in accordance with 29 CFR 1910.120 (SARA III) and Missouri State Statutes. Methods and procedures have been developed within the facilities Emergency Operations Plans that include emergency response regarding chemical spill(s) that could affect the safety of personnel and emergency responders. This plan may also include incident stabilization, property protection, and the area or population likely to be affected by such a release.

B. Actions to be taken by Operating Time Frames

1. Mitigation

- a. Maintain manufacturers, storage facilities, and other potential sources that have been identified and are on file with the OEM that contain hazardous materials which may affect the city, county and watershed areas.
- b. Facilities, agencies, personnel, and resources necessary to support a hazardous materials response in accordance with Resource Management have been identified. (**see ESF-7**).
- c. Maintain standard operating procedures/guidelines for responding to hazardous materials releases.

- d. Facilities such as hospitals, nursing homes, and adult congregate living facilities that could create special problems during an evacuation have been identified.
(see **Mitigation Plan, Essential Facility Maps**)

2. **Preparedness**

- a. Conduct hazardous materials and safety awareness presentations for the community as needed.
- b. Organizations that work with hazardous materials should develop a relationship with private resources that have experience working with Hazmat incidents.
- c. Organizations that work with hazardous materials should verify the status of their equipment and resources on a regular basis.
- d. Hazardous materials response training requirements:

Minimum training will be based on the duties and functions to be performed by each responder of an emergency response organization (fire, police, EMS, emergency management, public works, health, etc.). All responders must meet the minimum skill and knowledge levels required for the function they are to perform before they are permitted to take part in actual emergency operations. All employees who participate in emergency response shall be given training in accordance with the following paragraphs:

- **FIRST RESPONDER AWARENESS LEVEL**

First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying authorities of the release and take steps to secure the scene. First responders at the awareness level shall have sufficient training or have sufficient experience to objectively demonstrate competency in the following areas:

- An understanding of the roles and types of responders in a hazardous materials incident in accordance to the NFPA, the EOP and the agency's standard operating procedures and/or emergency response plan.
- An understanding of hazardous materials and their associated risks during an incident.
- An understanding of the potential outcomes with hazardous materials releases.
- The ability to recognize the presence of hazardous materials.
- The ability to identify the hazardous materials with the use of the North American Emergency Response Guidebook, available placards, or other methods available.
- The ability to recognize the need for additional resources and to make the appropriate notifications.

- **FIRST RESPONDER OPERATIONS LEVEL**

First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures. First responders at the operational level shall have at least twenty four hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level. The department/agency that employs the responder shall be responsible for certifying their competency.

- An understanding of all the competencies required at the awareness level.
- An understanding of hazardous material terminology.
- An understanding of hazard and risk assessment techniques.
- An understanding of the proper use and selection of personal protective equipment. (Level B Suit)
- The ability to perform basic defensive control, containment and/or confinement operations.
- The ability to conduct decontamination operations.

- **HAZARDOUS MATERIALS TECHNICIAN LEVEL**

Hazardous materials technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of the hazardous substance. Hazardous materials technicians shall have at least forty hours of training equal to the first responder operations level and in addition have competency in the following areas. The department/agency that employs the Technician shall be responsible for certifying their competency.

- An understanding of all the competencies required at the operations level.
- An understanding of hazard and risk assessment techniques.
- An understanding of basic chemical and toxicological terminology and behavior.
- An understanding of termination procedures.
- The ability to detect, classify, identify and verify known and unknown materials by using field survey instruments and equipment.
- The ability to function within an assigned role in the Incident Command System.
- The ability to implement the organizations standard operating procedures and/or emergency response plan.
- The ability to select and properly don specialized chemical personal protective equipment provided to the hazardous materials technician.
- The ability to perform advanced control, containment, and/or confinement operation.

- The ability to conduct decontamination operations.

- **INCIDENT COMMANDER LEVEL**

The Incident Commander (IC) is an individual who may assume control of a hazardous materials incident. To function as an IC, an individual shall have at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas. The department/agency that employs the Incident Commander shall be responsible for certifying their competency.

- An understanding of all the competencies required at the operations level.
- An understanding of the Incident Command System (ICS).
- An understanding of local, county, state and federal emergency response plans and response capabilities.
- An understanding of the hazards and risks associated with working in chemical protective clothing.
- An understanding of safety considerations during a hazardous materials incident.
- The ability to manage multi-agency, multi-functional operations.
- The ability to manage decontamination operations.

e. Training normally available through the LEPC:

- Hazardous Materials Awareness Level
- Hazardous Materials Operations Level
- Hazardous Materials Technician Level
- Incident Management System (through SEMA)
- Other training as requested and approved such as Propane Emergencies, Tank Truck Emergency Response, Train Derailments, Emergency Response to Terrorism, etc.
- Additional training information may be found in the Preparedness Plan located at the OEM.

f. Refresher Training

Employees who are trained in accordance with 29 CFR 1910.120 shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly.

g. A statement shall be made of the training competency, and if a statement of competency is made, the appropriate department/agency shall keep a record of the methodology used to demonstrate competency.

h. Exercises

The Greene County LEPC is responsible for conducting periodic drills and/or exercises to test and/or improve this ESF. As a minimum a tabletop, functional, or full-scale exercise should be held annually. **(See TEP, Appendix A in the Preparedness Plan for a schedule of exercises.)**

3. Response

a. Notification

The immediate notification of appropriate public agencies of a hazardous chemical release is the responsibility of the spiller. The spiller shall provide the call taker with the appropriate information to complete the Chemical Emergency Notification Report (**see Appendix 3**) and a safe route of entry to the site for emergency personnel.

Emergency notification

- Shall be made by the spiller or witness to the Emergency Communications Department (**911**) and the LEPC. In addition, reliable, effective, and timely notification by the facility emergency coordinators and the community emergency coordinator to persons designated in the emergency plan, and to the public, that a release has occurred.
- Call the state's official 24-hour number staffed by MDNR at 573-634-2436
- Notify LEPC at 869-6040 or the appropriate response agency
- Call the National Response Center at 1-800-424-8802
- Provide as much information as possible when making phone notifications.
- Follow-up with a written report on response measures taken, on health risk information. A report should be sent to the MERC and the local LEPC.

Administrative notification

- Shall be made by the Incident Commander to the Emergency Communications Center (ECC), **417-865-3624**.

b. Incident Command

The senior qualified emergency response official responding to an emergency shall assume Incident Command. All emergency response activities shall be coordinated and controlled in accordance with the Incident Command System (ICS). Communications will be coordinated by the Incident Commander through the ECC.

The Incident Commander shall make an assessment of the situation and classify the emergency as specified below:

• **LEVEL 1: PROBABLE EMERGENCY SITUATION**

No evacuation or sheltering other than from the immediate scene. This level of incident does not pose a chemical exposure hazard to first responders using dermal and respiratory gear. Examples of this level of incidents are minor releases of fuel from vehicular crashes, small releases of corrosives, and illegally discarded chemical containers that are not in danger of releasing substances. This level can be controlled by the Operations Level Responder, is confined to a small area, and poses no immediate threat to life or property.

- **LEVEL 2: LIMITED EMERGENCY SITUATION**

An incident involving a greater hazard or larger area which poses a potential threat to life or property and which may require a limited evacuation or in-place protection in the surrounding area. These incidents may require the use of special chemical protective gear. Examples of this level may be releases of significant quantities of volatile materials at fixed facilities or cargo tank releases in transportation.

- **LEVEL 3: FULL EMERGENCY SITUATION**

An incident or accident involving a severe potential exposure to the responders or the general public. This level involves the most severe threats to life and property, the potential for a large and expanding hazard area, and protective actions well beyond the initial isolation distance. Mitigation may require a large-scale evacuation and the expertise or resources of private industry.

c. Plan Activation

If it becomes apparent that control of the incident is beyond the response capabilities of the initial responding department/agency, a "Type I or II" emergency will be declared in accordance with the procedures and guidelines set forth in the Springfield Fire Department protocols.

d. Public Warning

Initial emergency response notification will be made by the ECC to emergency responders using established procedures. Additional partnership coordination will be handled by Battlefield's EOC.

News releases shall be made by radio (KTTS), social media, and local news networks to provide information with regards to evacuation or in-place protection procedures within or near the affected area.

Public Warning shall be issued in accordance with procedures and guidelines set forth in **ESF-15**. Response actions shall be based on the following population protection options:

- Evacuation – Voluntary or forced removal of people from an affected area (**see ESF-17**).
- In-Place Protection - Advising people to stay indoors and attempting to restrict the air flow into a structure (**see ESF-17**).
- Ingestion Advisory - Drinking water and food crops may be contaminated by a chemical release. A threat to food and water supplies must be identified and information released to the public.
- Sewage and Runoff - A hazardous chemical release may contaminate sewage systems or area streams and lakes. Such contamination could create a public health threat and serious environmental problems.

e. Documentation

Response activities shall be documented on the Chemical Emergency Notification Report (**see Appendix 3**) by the LEPC. This documentation shall be evaluated for development of new training sessions. Data on overall incident occurrence shall be provided to all participating organizations and used for plan revisions.

f. Incident Commander's Responsibility

The Incident Commander is responsible for monitoring the response activities to ensure that appropriate containment and control measures are implemented. Containment and control measures may include but are not limited to:

- Dikes
- Berms and Drains
- Trenches and pits
- Booms
- Barriers and soil
- Stream diversion
- Patching and plugging
- Portable catch basins
- Re-orientation of containers
- Hydraulic and mechanical dredging
- Evacuating/In-Place Protection
- Skimming or pumping
- Dispersion or dilution
- Vacuuming
- Establishing Perimeter

g. Initial Assessment

The fixed facility operators should perform the initial assessment of a release incident. It should be recognized that industrial capability to assess the situation may be supported by in-depth knowledge of the chemicals, facility and environmental effects. The fixed facility is responsible for damages resulting from the release and should provide timely and accurate information on a release situation.

h. Restoration

- The local jurisdiction, in conjunction with state and federal agencies, is in charge of managing restoration activities.
- Treatment of contaminated soils or waters is the responsibility of the spiller.
- Off-site transportation for storage, treatment or disposal may be provided by the spiller, subject to state and federal regulations.

4. **Recovery**

a. Hazardous Material Treatment

A hazardous materials release can be treated with physical, chemical or biological countermeasures. The operator (spiller) is responsible for the clean-up and treatment of the spill. State and federal technical resources are readily available to provide technical assistance on selection or overview of treatment activities.

b. Countermeasures

The Incident Commander is responsible for selecting and implementing the appropriate countermeasures (actions taken to contain, control, and recover from the incident). This action should be coordinated with the DNR, LEPC and the Health Department as required.

DNR and the LEPC, is responsible for monitoring the cleanup and disposal of contaminated materials.

c. Spiller's Responsibility

The spiller is responsible, in accordance with state and federal law, for the cost of all cleanup, countermeasures, reimbursement and remediation.

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Primary Agencies:

**Springfield Fire Department,
Logan-Rogersville Fire Protection District
Battlefield Fire Protection District**

1. Provide support and focus on the hazardous materials in fixed facilities and transportation routes by performing a hazards analysis and/or updating the current analysis utilized.
2. Provide guidance and manage the maintenance of the Hazard Materials Response ESF to the Battlefield Emergency Operations Plan for the service area that utilizes the expertise and resources of public and private organizations and provides for safe, timely and cost effective response by public and private groups.
3. Schedule training and exercises on hazardous materials in coordination with local government officials, academic institutions, fire districts and private participants.

B. Support Agencies:

City of Battlefield

1. Coordinate post-incident reports with input from all involved agencies. After all large spills, and spills with injuries, all agencies will compile their post-incident reports and submit them to the LEPC within 30 days of incident stabilization for review, debriefing, recommending plan modifications and for use in training and exercise programs.
2. Coordinate in field planning and logistics support.

Springfield-Greene County Office of Emergency Management

1. Activate the EOC to support the City of Battlefield if requested.
2. Coordinate the activities of the LEPC.
3. The OEM Director or designee will act as the Community Emergency Coordinator.
4. Facilities Emergency Coordinators are designated by the facility and are listed on the Tier II forms and are on file with OEM, LEPC, local fire departments and MERC.

Fire Protection Districts

1. Respond to all reports of hazardous materials incidents to determine the nature and scope of the incident.

2. Establish an Incident Command, assume command, or support the Incident Commander if command is established under another organization to control/coordinate the incident. Determine the hazard level of the incident and direct response operations to include:
 - a. Establish site security and hazard exclusion zones within the hazardous sector.
 - b. Determine the nature of the hazardous material.
 - c. Based on estimates of likely harm establishes options for mitigation, selecting appropriate options and managing the mitigation effort.
3. Coordinate with all private and public agencies on-site at the Incident Command Post. Provide information sources as necessary for law enforcement and medical authorities on the material, hazard evaluation and environmental damage assessment.
4. Maintain the Fire Service Hazardous Material Response Standard Operating Procedures and guidelines. This effort should also include mutual aid resources.
5. Direct facility personnel to remove any chemicals that may cause fire or explosion, create toxic gas releases or cause environmental damage, if safe to do so.

C. State Support Agency

Department of Natural Resources (DNR)

Support to local governments in response to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency

7th Civil Support Team

Support to local governments in response to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency.

D. Federal Support Agency

Environmental Protection Agency (EPA)

Support to Federal, State and local governments in response to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency.

E. Non-Governmental Organizations

Fixed Facilities

1. Designate Hazardous Materials Coordinator responsible for assisting in the preparation of this plan and for the preparation of compatible on-site contingency plans. These plans shall include specific responsibilities, notification and emergency response procedures and procedures and guidelines and available mitigation resources.
2. Emergency notification shall be made to the Springfield-Greene County Emergency Communications Center.

The immediate notification of appropriate agencies of a hazardous chemical release is the responsibility of the spiller. The spiller shall provide the call taker with the appropriate information to complete the Chemical Emergency Notification Report, (see Appendix 3) and a safe route of entry to the site for emergency personnel.

3. Provide technical support as requested in development of off-site risk assessment and contingency planning.
4. Provide support to the Incident Commander at the Command Post during an incident.
5. Provide personnel, technical expertise and equipment support; and participate in chemical hazard exercises, drills, and other training activities.

6. Initiate notification of a chemical release incident, and provide information to the appropriate officials/agencies as specified in Superfund Amendment and Reauthorization Act of 1986 (SARA).
7. A complete list of fixed facilities including name, address and contact information can be found on file at the Office of Emergency Management and in the Computer Aided Management and Emergency Operations (CAMEO) system as well as the State of Missouri on-line Federal E.P.A. Tier II reporting system. See Appendix 6 for a list of Extremely Hazardous Materials (EHS) Facilities.

Pipeline Industry

1. Responsible for a plan that outlines the general actions and establishes the policies to be followed in the event of a chemical release incident.
2. The company's Hazardous Materials Coordinator shall contact each site and direct the company's mitigation activities and support off-site efforts during any chemical release emergency.
3. Provide support to the Incident Commander at the Command Post during an incident.
4. Provide technical guidance, personnel and hardware to support the training and exercise program directed by the LEPC.

Rail and Highway Carriers

1. Develop a chemical incident emergency response plan.
2. Maintain a response capability in the event of a hazardous material incident involving their stock.
3. Provide technical assistance, personnel and resources to the Incident Commander to mitigate incident(s) involving their stock or property.
4. Provide proper identification of all hazardous materials carried.
5. Provide technical expertise, personnel, and hardware to support the training and exercise program of the LEPC.
6. Provide a useful list of major hazardous material commodities shipped and periodically update this list.

State and Federal Support

1. Planning, training and on-site assistance through state and federal agencies. Details of these resources and methods of acquisition are described in the State Emergency Response Commission Chemical Emergency Plan.
2. Notification to state and federal agencies is the responsibility of the person or organization releasing regulated chemicals.
3. Access to state resources for support during an incident/accident is through the Incident Commander and/or the EOC as needed.

V. DIRECTION AND CONTROL

- A.** The chief of each fire department will be responsible for controlling fire operations within the defined boundaries of their jurisdiction.

Incidents involving aircraft at the Springfield-Branson National Airport property will be under the direction of the Director of Aviation.

- B.** Operations will be controlled by the senior fire officer at the scene and/or from the EOC.
- C.** In the event of a hazardous materials spill, response agencies and spiller (s) shall follow their own Standard Operating Procedures and Guidelines to meet the needs of the incident.

- D.** Outside resources brought into a jurisdiction will be controlled by the procedures outlined in State law, fire mutual aid, and mutual aid agreements.
- E.** Normally, Incident Command for a Hazardous Material Incident will be the responsibility of the local fire department. In the city of Springfield the fire department is the designated agency to manage any hazardous material incident, assisted by other agencies/departments.
- a. Based on the Incident Command System, the Incident Commander is the individual in charge. The Incident Commander shall coordinate all actions including, but not limited to the following:
- Establish an on-scene Command Post.
 - Provide initial hazard assessment to response personnel and the general public.
 - Prescribe personnel protective measures.
 - Issue public warning.
 - Lead the initial environmental assessment.
 - Provide information to EOC, if activated.
 - Provide for decontamination of personnel and equipment.
 - Determine when re-entry is possible
 - Facilitate Evacuation / In-place protection
- b. Each emergency response agency shall report to the Incident Commander upon arrival on scene and confer with this individual for coordination of all activities. The Incident Commander has the authority to direct the overall operations, select mitigation concepts and methods and resolve conflicts.
- c. It is the responsibility of the Incident Commander to recommend evacuation/in-place protection actions, after close coordination with all agencies involved and in-depth discussion with the appropriate officials to assure proper warning, transportation, shelter and care for the evacuees.

VI. CONTINUITY OF OPERATIONS

The key purpose of Continuity of Operations planning is to provide a framework for the continued operation of critical functions. When implemented, these plans will determine response, recovery, resumption, and restoration of Department/Agency services.

COOP Plans for the Departments/Agencies present a manageable framework, establish operational procedures to sustain essential activities if normal operations are not feasible, and guide the restoration of the critical functions of the Department/Agencies functions. The plan provides for attaining operational capability within 12 hours and sustaining operations for 30 days or longer in the event of a catastrophic event or an emergency affecting the department.

VII. ADMINISTRATION AND LOGISTICS

A. Administration

1. In accordance with the Revised Statutes of Missouri (RsMO) sections 260.500 through 260.550, local fire departments responding to a local hazardous substance emergency may recover costs associated with the event. A detailed accounting of expenses incurred is required to receive reimbursement. Examples of the information that should be kept and reported to the EOC include the following:

- a. Apparatus and personnel responding
 - b. Additional personnel
 - c. Personal protective equipment used
 - d. Sorbent materials used
 - e. Plugging and patching materials used
 - f. Decontamination supplies used
 - g. Communications costs incurred
 - h. Equipment damaged during incident
2. Records of hours worked (responders, facility staff and volunteers) and materials used must also be reported to the EOC for use in determining the total cost of the incident.
3. A report should also be compiled describing the nature of the release, the conditions and circumstances of the release as well as environmental impact sustained.
4. A ***Chemical Emergency Notification Report*** (see **Appendix 3**) will be completed as soon as possible. The form can be completed by LEPC upon notification of the incident.

B. Logistics

1. A list of Tier II reporting facilities including facilities that store extremely hazardous substances (EHS) is maintained in the State of Missouri on-line Federal E.P.A. Tier II reporting system. LEPC and the Hazmat Teams maintain a copy of the list. The LEPC regularly updates the list with input from the facilities and distributes the updates to the teams.
2. Facility maps of sites within the City of Battlefield that store chemicals are maintained by the City of Battlefield. Additional maps may be developed by local GIS Departments to provide information on census data in the affected area.
3. Communications will be handled through the Springfield-Greene County Emergency Communications Center as directed by the Incident Commander.
4. Supply requisitions will be made through normal channels when possible. Non-standard requisitions should be requested through the EOC. The EOC maintains lists of support agencies and resources for hazardous materials incidents.

VIII. ESF DEVELOPMENT AND MAINTENANCE

The Office of Emergency Management in coordination with the City of Battlefield, the LEPC, the Springfield Fire Department and Logan-Rogersville Fire Protection District are responsible for the annual review and update. Exercises are conducted through a scheduling process in coordination with the LEPC and associated agencies.

IX. REFERENCES

- A.** Superfund Amendment and Reauthorization Act of 1986 (SARA)-42 U.S.C.9601 et seq. (1986).
- B.** Emergency Planning (EPCRA Sections 301-303, 40 CFR Part 355)
- C.** Emergency Release Notification (ECPRA Section 304, 40 CFR 355)
- D.** Hazardous Chemical Storage Reporting Requirements (EPCRA Section 311/312, 40 CFR Part 370)

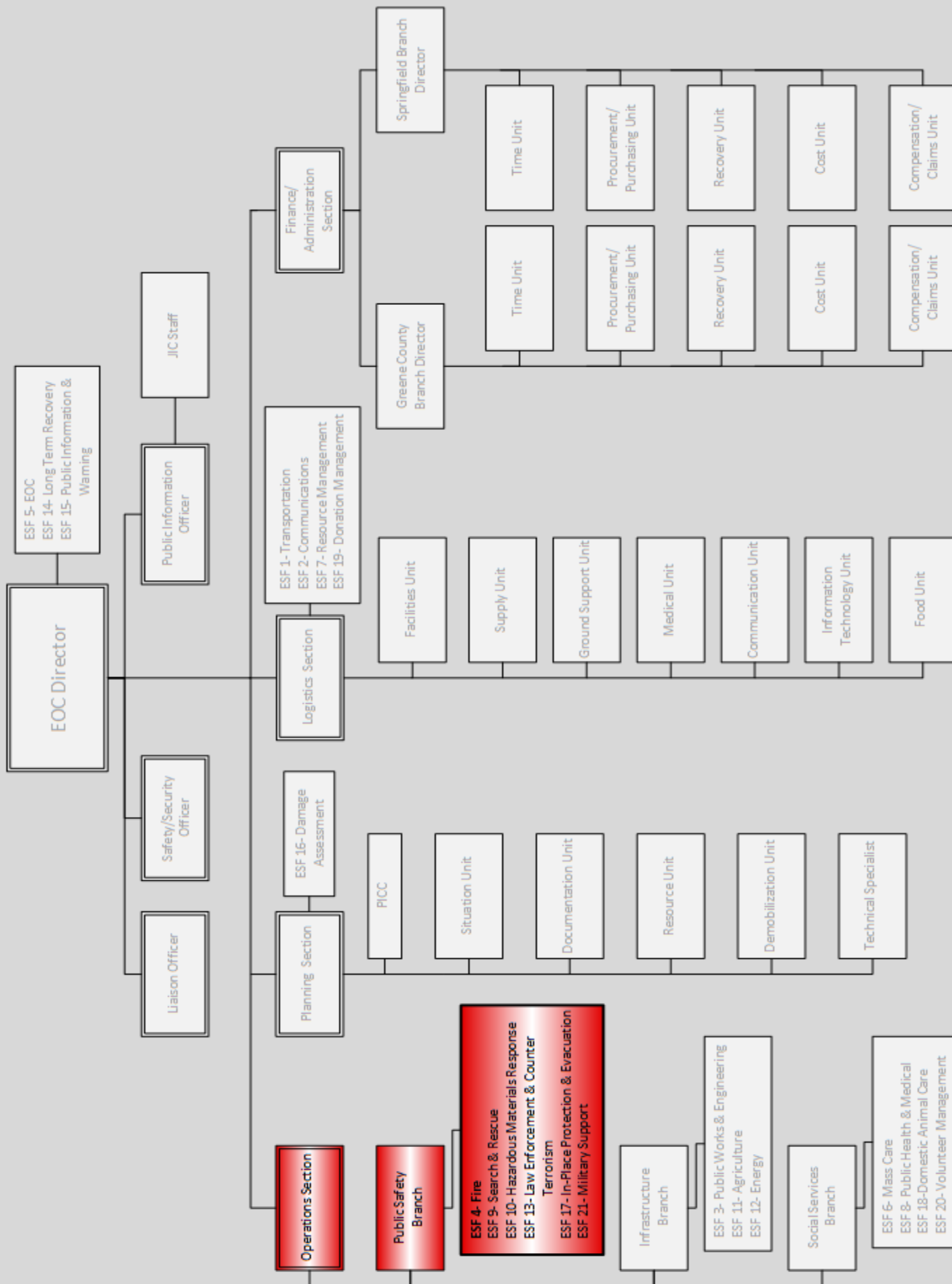
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APPENDIX 1

This is a restricted document

APPENDIX 2 ORGANIZATIONAL CHART



APPENDIX 3

CHEMICAL EMERGENCY NOTIFICATION REPORT

Date:	Time: AM / PM	Received by:
Caller's Name:		Representing:
Call Back Number:		Emergency Contact Name:

FACILITY
Name:
Address:
City and County:

RELEASE		
Date of Release:	Time:	Duration: hours minutes
Materials Released:		E.H.S. Yes / No
Amount Released:	lbs\ gals	Amount of Potential Release: lbs\ gals
Release Type:	Air Water Soil Sewer Drain	
Incident Description:	Fire Gas/Vapor Spill Explosion Other:	
Location of Container:	Above Ground Below Ground	
Type of Container:	OTR Truck Railroad Car Drum Storage Tank Pipe	
4 Digit I.D. Number:		Placard/Label information:
Weather Conditions:	Wind Speed:	Direction: N S E W Temperature: F

Health Risks:
Precautions (Public Safety Concerns):

AGENCIES NOTIFIED:		
Local Fire	911	___yes___no___time
Local Emergency Planning Committee	417-869-6040	___yes___no___time
Missouri Dept. of Natural Resources	573-634-2436	___yes___no___time
Emergency Response Office	573-526-3348	___yes___no___time
National Response Center	800-414-8802	___yes___no___time
CHEMTREC	800-424-9300	___yes___no___time
Environmental Protection Agency	913-281-0991	___yes___no___time
Other:		___yes___no___time

Additional Remarks:

APPENDIX 4

CITY UTILITIES NOTIFICATION OF HAZMAT SPILL

IN THE SPRINGFIELD WATERSHED AREA

I. PURPOSE

To prevent or contain contamination of a hazardous material to the Springfield water supply, a policy has been developed to notify City Utilities of any HAZMAT spill that should occur in the Springfield Watershed. This includes any spills or contamination that should occur outside of Springfield or Greene County, but still in the watershed (i.e., Stockton Lake).

II. CONCEPT OF OPERATIONS

In the event a hazardous material is spilled within the confines of the Springfield, Missouri watershed, the following numbers should be contacted for notification and response purposes.

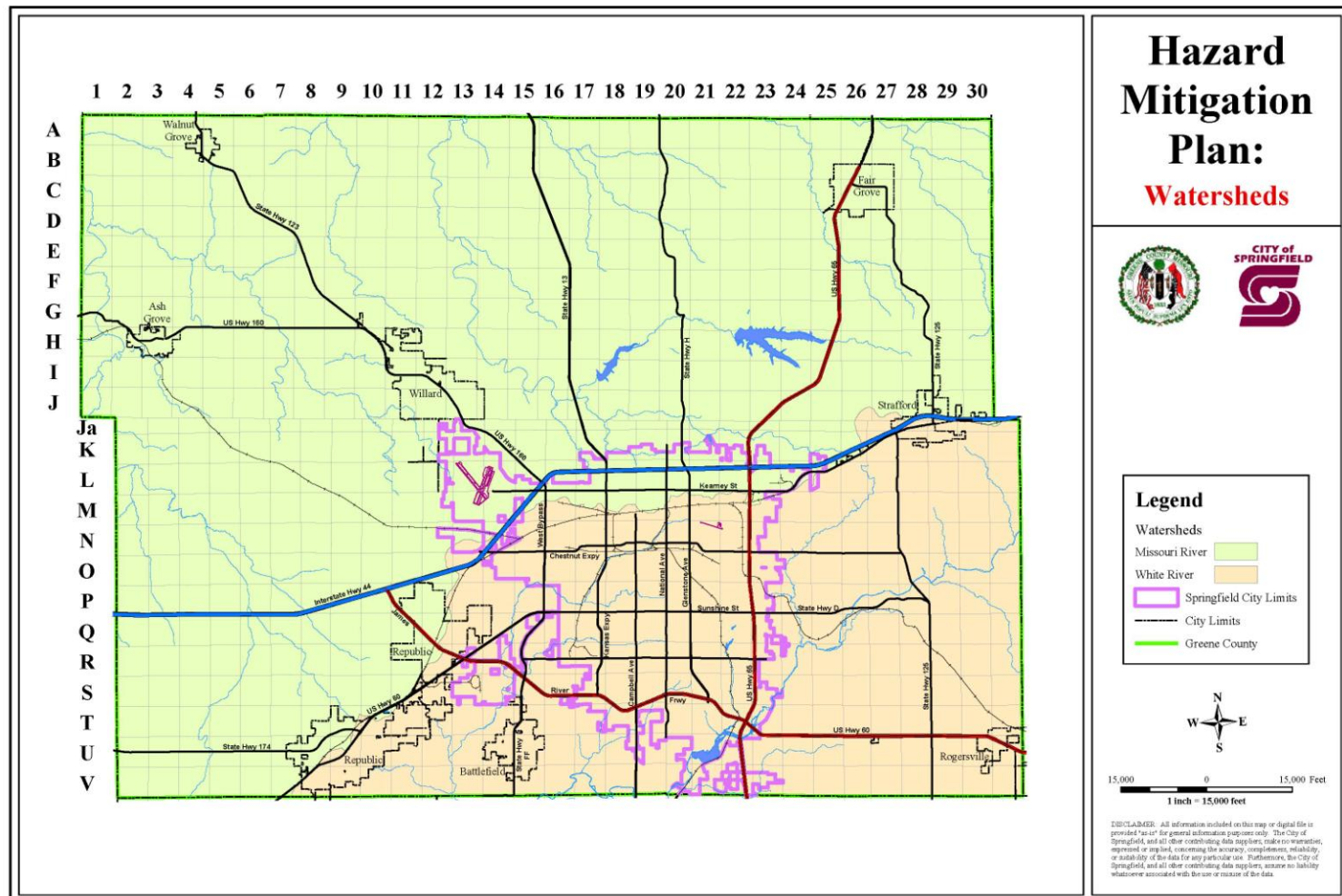
City Utilities Operations Center	(417) 865-2197
Primary Number:	(417) 863-9000
Secondary Number:	(417) 831-8902
Tertiary Number:	(417) 863-9000 (Ask for the Water Treatment Duty Supervisor)

The Greene County Local Emergency Planning Committee (LEPC) has notified emergency response agencies outside of Greene County of this policy.

APPENDIX 4

ATTACHMENT A

SPRINGFIELD WATERSHED AREA



APPENDIX 5

RADIOLOGICAL INCIDENTS

I. PURPOSE

This document provides for the organized effort necessary to minimize the effects of radiation on the people, resources and environment through detection and implementation of preventive and remedial measures.

II. SITUATION AND ASSUMPTIONS

A. Situation

There are several types of situations that have the potential to cause a radiological incident.

1. Fixed Facilities - Hospitals, as well as various other facilities within Springfield-Greene County use or store radiological materials and dispose of radiological waste.
2. Transportation Routes - All transportation routes that traverse Springfield-Greene County must be considered in all radiological planning.
3. Nuclear Detonation – The United States, as well as several other nations, maintains a nuclear weapons arsenal. The possibility of one of these weapons being detonated accidentally or deliberately by terrorists or a full-scale strike against the U.S. must be considered. Even if nuclear detonations are distant from the jurisdiction, a protection system will be necessary to detect and assess the radiation hazard.
4. Radiological Dispersal Devices (RDD) – RDDs are conventional explosive devices combine with radioactive materials. RDDs involve the dispersal of radioactive materials over an area to contaminate the area and make them uninhabitable.

B. Assumptions

1. In the event of a radiological incident, assistance will be available from the state and federal governments and from the nuclear industry to detect, monitor, and predict radiological dispersion.
2. First responder organizations, particularly fire and law enforcement, will be part of the local radiological emergency support program and will conduct appropriate training for such response.
3. The chance of a nuclear detonation in Springfield-Greene County is not likely. RDDs and accidental releases are possible threats.

III. CONCEPT OF OPERATIONS

In an emergency involving radioactive materials the following elements must be considered:

A. Reporting Requirements

Federal laws closely regulate the reporting, handling, and transportation of radioactive materials.

1. Fixed facilities are required to report their radioactive materials under SARA Title III (CERCLA) to the Local Emergency Planning Committee (LEPC).

2. Highway and railway shippers of radioactive materials are required to report the material to be shipped, when it will be shipped, and the shipment route to either the State Emergency Management Agency (SEMA) or the Department of Natural Resources (DNR).

B. Response Capability

1. Local

- a. Fire and law enforcement personnel, as a minimum, receive awareness level training for hazardous materials as required under SARA Title III.
- b. The Springfield Fire Department and the Logan/Rogersville Fire Protection District have Hazardous Materials capabilities trained to respond to and monitor radiological incidents.

2. State

- a. Response Teams - Trained radiological response teams are available from the state to respond to any radiological incident.
 - Primary Agency:
Department of Health and Senior Services
Center for Emergency Response and Terrorism, 800-392-0272.
 - Environmental Health and Communicable Disease
Central Office, Keith Henke 573-751-6112 or 573-291-8464
Northwest Office, Chuck Cooper 816-350-5431
 - Support Agencies:
Department of Natural Resources, 24 hour response: 573-634-2436.
State Emergency Management Agency, Duty Officer: 573-751-2748.
- b. Additional State Agency Assistance
 - Missouri State Highway Patrol, Troop D Headquarters, in Springfield, maintains a First Responder Kit to use for a radiological incident.
 - Missouri Department of Transportation has First Responder Kit available in the district offices that are along identified radiological highway corridors. Personnel are trained by SEMA.
 - The Missouri National Guard 7th Civil Support Team (CST), stationed at Ft. Leonard Wood has radiological monitoring capability and can be accessed by contacting the SEMA.

3. Federal

The U.S. Department of Energy has within its structure, Nuclear Emergency Response Teams (NEST). These specialized teams respond to nuclear or radiological dispersion device incidents that may or may not be terroristic in nature.

C. Monitoring Equipment

Radiological monitoring equipment for local organizations is provided, calibrated and maintained by the State Emergency Management Agency. The following types of equipment are available:

First Responder Kits:

Emergency response personnel responding to a radiological incident use a First Responder Kit. Radiological monitor training is required to operate these kits. Each kit contains:

- one CDV-715 high-range survey instrument
- one CDV-700 low-range survey instrument
- one CDV-750 dosimeter charger
- two CDV-742 high-range personal pocket dosimeters
- one CDV-730 low-range personal pocket dosimeter
- Guidance manuals for each kit.

Information on how many First Responder Kits are available and where they are located can be obtained from SEMA.

D. Accident Assessment

1. First on-the-scene responders should follow the appropriate “Action Guides” for radioactive and other hazardous materials in the Emergency Response Guidebook (ERG). These Action Guides conservatively assume minimal specialized training by first responders; hence, response actions beyond those indicated in this guide would depend on the particular accident contingencies and the expertise of the responders.
2. Since specialists with the expertise to assess the degree of the radiological hazards in an accident will seldom be at the scene of the accident in the initial response phase, provision should be made for rapid and reliable communication linkages between emergency first responders and radiological authorities not at the scene.
3. State radiological response teams have been established for rapid notification and deployment on a 24-hour basis. Procedures and procedures and guidelines for response by adequately trained teams have responsibility for the following functions:
 - a. Assess need for first aid and lifesaving efforts, as appropriate;
 - b. Determine if radioactive materials and other non-radioactive hazardous materials, such as flammable and corrosives, are involved and, if so, which have separate hazards that might interact with radioactive materials or their packaging;
 - c. Establish procedures and procedures and guidelines for controlling access to and egress from the accident scene;
 - d. Establish and adopt safety measures for response team members to prevent injury from environmental factors not related to radioactive or other hazardous materials, such as avoiding electric shock, falls, and fire;
 - e. Establish methods for obtaining all possible information regarding the type of packaging; the information from marking, labeling and placarding; the type, quantity and chemical form of the radioactive materials involved; and the observable indicators of release of radioactive materials from packaging;
 - f. Obtain information on the accident including location, condition of radioactive materials packages, fire potential, weather conditions, and any other relevant information;
 - g. Determine capability of commonly available radiological survey instruments to measure specific radionuclides identified on shipping papers or labels;
 - h. Measure radiation levels, as appropriate, if capability exists (see “f” and “g” above).
 - i. Perform preliminary dose projections, if needed, based on observation, measurements, and actual or potential radioactive releases; and

- j. Establish criteria for determining need and methods for taking environmental samples.

E. Protective Actions for the Public

The three options for protecting the population are access control, evacuation and shelter. Local officials will implement one or more options, depending on the best available estimate of the disaster situation.

1. Controlling access to the area should be included as a method here. It is the most likely action to be taken until experts from the Department of Health and Department of Natural Resources arrive.
2. Evacuation will be considered based on the condition of the area to be evacuated, the condition at the selected destination, and any risk of exposure while en-route. Evacuation operations are discussed in ESF-17.
3. Sheltering in place will depend on the relative protection from potential disaster agents provided by the available residential, commercial, and recreational structures in the community. People will be advised to stay indoors and reduce the airflow into the structure. In-place shelter is discussed in ESF-17.

F. Decontamination

The State Department of Health should be contacted regarding decontamination of personnel, facilities, equipment, and the environment.

G. Cleanup

1. The responsibility for selecting and implementing the appropriate countermeasures is assigned to the Incident Commander in coordination with appropriate technical resources.
2. The spiller is responsible, according to state and federal law, for the costs of all cleanup and countermeasures. The Incident Commander, in conjunction with requested state and federal resources (DNR and EPA), is responsible for determining these measures and monitoring the cleanup and disposal of contaminated materials.

IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

Command of the incident will be controlled through the use of the Incident Command System. There should be one person or agency with overall authority and responsibility for radiological assessment and control.

Incident Command will be used for on-scene management of a response to a hazardous materials (radiological) incident, as discussed in this ESF.

A. SEMA offers the following radiological training:

1. Radiological Monitor (RM) training gives an overview of ionizing radiation, the biological effects of radiation exposure, an overview of radiological hazards, and enables you to properly select and use radiological instruments. This training also enables participants to take self-protective actions. This is an 8- to 12-hour course. Independent Study 3 (IS 3) is a prerequisite.
2. Refresher Radiological Monitor training offers an overview of the RM course and can be obtained through SEMA. This is a 2- to 4-hour course.

3. Radiological Response Team (RRT) course provides a review of the RM course. It also provides an understanding of the roles and responsibilities and the framework of a radiological response team's function in the state and local Radiological Protection System (RPS). It enables participants to make proper decisions in a nuclear threat emergency and to implement protective actions. This is a 32-hour course. The RM course is a prerequisite.
 4. A refresher RRT course is available through SEMA and is an 8-hour course.
 5. Radiological Officer (RO) training qualifies selected individuals to serve as local radiological officers who are responsible for developing, managing, evaluating and exercising their local radiological protection system. This is a 24-hour course. The RRT course is a prerequisite.
- B. Missouri Department of Health provides radiological training to hospitals and ambulance services. The Hospital Radiation Accident (HRA) course provides participants with a basic understanding of radiation and its biological effects and provides basic procedures and procedures and guidelines for managing medical emergencies due to radiation accidents.
 - C. SEMA and the Division of Fire Safety will assist with arranging for hazardous materials awareness level courses for all first responders.
 - D. Independent study courses for radiological incidents are available from the Federal Emergency Management Agency (FEMA) by contacting SEMA.
 1. IS 3 - Radiological Emergency Management.
 2. IS 301 - Radiological Emergency Response: An Independent Study

V. ADMINISTRATION AND LOGISTICS

Documentation of key data obtained or developed related to accident assessment will be made and maintained as a permanent record.

VI. REFERENCES

- A. Public law 99-499, Superfund Amendments and Reauthorization Act (SARA), Title III, 1986
- B. North American Emergency Response Guidebook
- C. Memorandum of Understanding Concerning Radiological Emergency Response (Department of Natural Resources, Department of Health, and SEMA)
- D. 40 CFR, Part 302, Designation, Reportable Quantities, and Notification Issues for Hazardous Materials
- E. 44 CFR, Part 10, Environmental Considerations
- F. Chapter 292, Health and Safety of Employees, Missouri Emergency Response Commission, Revised Statutes of Missouri, August 2002
- G. Public Law 101-615, Hazardous Materials Emergency Planning, Revised 1995
- H. Public Law 85-256, Price-Anderson Act, provides for a system of compensating the public for harm caused by a nuclear power plant accident.